

MEMORANDUM

General.

Notes.

RME
21

1897-98

Aug 31st to Apr. 20th.

Placitas, Zacatecas to
Alta Mira, Tamaulipas.

Si acaso algo me sucediera
el que encuentre esto
me haría un gran favor
si escribiría a mi madre
la Sra. Q. W. Goldman.

Alila

California

Estados Unidos

E. A. Goldman.

most of these are of

Aug 31. Plateados,
Zacatecas. We left Colatlan
and made Colatlan
our place after travelling
about 25 m.

The road ascended
all day most of the
time very gradually.
The altitude here is
about 7600 ft.

Plateados is a large
ranch situated near
the edge of some
volcanic plains and
a short distance below
the lower edge of the
lowest peak.

Weather today has
been pretty clear but
most of the time

Sp. *Myiops*
Thomomys (col)

Sciurus (collected?) (col)
 " (collected) (col)
Sciurus (col)
Sciurus (col)
Sciurus (col)
Peromyscus (l. covered up) (col)
 " (l. covered up) (col)
 " (l. covered up) (col)
 " (l. covered up) (col)
Sorex, (2 sp?) (C)
Dipodomys (C)
Neotoma (C)

The past week it has
 rained every day,
 Vig. Mangrove,
Medicago (2 sp) - Red
 bark and rough bark, -
 scrub oak - lots of several
 species.

Sept. 1.
 Made a trip today out
 and up to near the
 top of a timbered ridge
 where here that appears
 to be cut off from the
 rest of the ridge. Near
 here I found three species
 of *Peromyscus* and a few
 cherry trees besides
 other *Dipodomys*. Makes holes
 frequently two or more
 together and
 tolerably close together

Birds of Plateau.
 Colaptes cafer
 Melospiza
 Dendroica
 Corvus
 Pica
 Sturnella m. m.
 Lanius c. excubitor
 Columba f. caerulea
 Lanius
 Dendroica villosa
~~Amphispiza~~
 Aphelocoma
 Chondestes
 Lanius c. m.
 Dendroica fusca
 Salpinctes obsoletus
 Chondestes cyathogaster
 Colinus
 Anthus m.
 Lanius (l. excubitor)
 Geococcyx affinis?
 Junco cinereus
 Philoagrus cin.

but frequently there
 is only one. They are
 apparently larger than
 those of small species
 of Dipodomys but not
 so large as those of
 Dipodomys spectabilis.
 One of the two specimens
 taken today lacked the
 usual white tip to
 tail. They were taken
 in traps baited with
 wheat.

Lepus (collare) shot
 among the oaks pretty
 well up toward the
 top of the highest
 ridge here.

Sept. 2.
 Went up today to the
 top of the ridge near
 and with Dr. Rose
 and set out some

Parus wollweberi,
Telophaga picta
Prochilodus rufus
Basileuterus leucotis.
Troglodytes,
Thryothorus (similar
to *T. bewickii* Baird),
Euptilotis,
Eupidornis,
Vireo,
Myadestes,
Sylvania pusilla,
Pipilo maculatus,
Melanerpes formicivorus,
Scardafella inca,
Xanthocephalus xanthocephalus,
Dendrocygna?
Penelope,
Harporhynchus curvirostris,
Contopus pertinax,
Agelaius vociferus,
Cardellina

happened. Found the top
of the ridge rather
barren - no signs of
Squirrels or other things
that would be found
living in the shelter
thick bunches of grass.

Veg. Pines of three
sp. were noted by Dr.
Rose well up to toward
the top. Cuts of sev.
sp. Madroños and
manzanilla is common
also wild cherry.

Sept. 3d.

Go up again to the
top of the ridge. Found
the alt. to be 8050 ft.
according to aneroid.

Tamias. One was
seen today in the
oak and pine woods
at 8000 ft. altitude.

Euptilotis. Yesterday
I ran across a pair
of this fine Pigeon and
after chasing them about
for at least an hr. finally
succeeded in getting
one of them. Today I
got another and found
them feeding on
wild cherries. At Sta.
Pereval de Tepic I
shot one that had a
large caterpillar
in its mouth.

Sept. 4th.

Got traps near Sta.
and plan to leave
tomorrow and return
to Coloctan.

Apelocoma. Mr. H.
saw one with a lizard
in its bill.

Colotlan.
Peromyscus (head of)
" (man of)

Sta. Maria.
Pyrocephalus r. mex.
Pipilo fuscus.
Chelidon erythrogaster.
Gambusia l. cruciata
Chondestes grammacus.
Zenaidura macroura.
Harporhynchus cucinatus.
Helodytes.
Falpinctes obsoletus.
Catherpes mexicanus.

Sept. 5. Colotlan.
Return here today.
Sept. 6.
Remain at Colotlan
and prepare to leave
tomorrow for Bolanos,
Yucatan.

Sept. 7. Sta. Maria, ^{at 5400}
Left Colotlan at a rather
late hour and stopped
on the road at a
ranch after travelling
about 30 miles over a
rather unrolling
country but by a
usually good road.
Peromyscus, the large
kind of. From stone
walls behind fields.
Peromyscus, a rather

Hta. Maria to Romeria.

Quercus.

Corticeus (var. sp.)

Aphelocoma.

Romeria to Bolanos.

Junco.

Pipilo fuscus

Chondestes.

Spinus p. mex.

The above were seen before we commenced to descend into the barranca in which Bolanos is situated.

small sp. probably the same as one taken at San Juan Capistrano. Taken in same place as the preceding species.

Sept. 8. Romeria, alt. 5700 ft.

Left the ranch Hta. Maria this morning about 8 A.M. and arrived here about 4 P.M. travelling probably 35 miles.

Aphelocoma, seen among the oaks today, probably the species recently described by Miller.

Sept. 9. Bolanos, alt. 4000 ft.

We left Romeria this morning and came down the river in about 4 hrs. Cool was steep for the last part of the way and there was the

Bolaños.
Peromyscus (sm sp.)
" (l. eared sp.)
Bassaris.
Spermophilus macrourus.

usual change in the
vegetation. ~~that~~
Vegetation here is rather
abundant and varied.

We stop at a mine
near town and are
welcomed by Mr. Hoising.

Sept. 10.

Spent mainly in
setting traps.

Weather. - Heavy
rains fall every day
here now. We were told
by Mr. Hoising that
for over three weeks now
it has not failed to
rain every night.

Sept. 11.

The canon here is
bordered by cliffs of
solid character and
therefore furnish

Bolafios,
Sceloporus lineatus,
Monotus mex.
Crotaphytus collaris,
Dipsosaurus dorsalis,
Columbigallina passerina
Catherpes mex.
Trochilus rufus.
Hummer (lsp.)
Melanerpes,
Geothlypis trichas,
Spinus G. mex.
Passerina cyanea.
Icterus wagleri,
Harporhynchus cur.
Pipilo fuscus.
Carpodacus mex. Iron.
Platyspiza.
Melanerpes elegans?
Corvus sinuatus.
Garrulus l. excubitor.
Ara militaris
Hummer (brood filled)

Bolafios
very little shelter to
mice but there are
loose rocks on the hillside
and plenty of vegetation.
Mice seem to be scarce
judging from the fact
that last night ^{only} one was
caught.

Peromyscus. Small
species probably same
as the rather slender
species that we have
been taking lately in
various localities. Caught
under a rock on the
hillside in trap
baited with tortilla
and wheat.

Fauna. — There is
a mixture here of
Tropical and Lower
Sonoran forms.

Bassariscus. Caught

Left again on Nov 7 for
Los Angeles. My mother
Ida accompanied me
and we spent the 8th
in home and visiting
at Pasadena.

Nov. 9 th.

Ida and I take the
train to Sta. Ana to visit
our Uncle Ruben's family
there.

Nov. 10 th

Spend most of the
day with members of the
family riding and looking
at the country around
Sta. Ana. Among other
towns we visited during
the day were Anaheim,
Fullerton and Ceresco.
In the afternoon I took the

train back to Los Angeles
leaving Ida to make a
longer visit.

Nov. 11.

I left Los Angeles for
El Paso.

Nov. 12.

Reach El Paso. Train
is behind time so I have
to stay over one day here.

Nov. 13.

Take the Mexican
Central train for Fresno,
Zacatecas. First stop
south of El Paso is Luna
Blanca. There only appeared
to be one house and that
was jammed full of
natives. P. Blanca is not
a regular station. Nearly
I saw signs of large and
small jumping rats and
small gopher holes. There

was also considerable grass
and the country looked
favorable for mice in general.

Zamalyuca. — About the
second stop S. of El Paso.

Soap works here. Only a few
houses but probably one could
arrange to stop in one of
them. Barren hills for 10 mi.
away. Saw signs of large
and small jumping rats
but no signs of gophers.
Country here is similar
to that about Tierra Blanca
but there is less grass and
more brush at and the
soil is alkaline in
character.

Nov. 14

Reach Presnells late
in the afternoon and
am surprised to find
the weather so mild

at this time of year. Very
slight frosts occur at night
but the days are warm
and pleasant.

Nov. 15

Take the train in the
evening for La Barea.

Nov. 16, La Barea

Arrive here this morning
or rather about noon
and this afternoon see
local officials and take
steps toward selling the
outfit I left here in Sept.
Spermophilus macrourus.
Seen along the road this
morning.

Nov. 17, Guadalajara

I leave La Barea and come
in here by rail on short
business trip.

Soil. All along the
road from Irapuato it

Guadalajara.

is of a dark color and very rich producing usually good crops of corn etc. without irrigation.

Today the corn is ripe but still in the fields and but there has been no frost this fall so far and there is still considerable green vegetation although on the hills and all higher ground it is now pretty dry the rainy season having ended sometime ago.

The main follows a part of the way along the valley of the Santiago

Guadalajara

river. That stream along this part of its course flows through a tolerably level plain and has not cut a deep bed for itself or left high bluffs but the surface of the stream is only a few ft. below the general level of the country. This is its character until the falls at Juanaacatan are reached when the river enters a deep gorge and drops down rapidly toward the coast plain.

Aleguiza — Near this station the hills covered with a rather thin growth of brush.

Guadalajara.

Large tracts of land along this part of the river's course become swampy during the rainy season and the mud in the roads becomes very deep.

Hills along the road usually have a rounded character but the higher ones have their sides deeply furrowed by arroyos that descend to the plain below. These arroyos testify to the abundance of rain that falls during the rainy season.

Mezquite trees a ft. in diam. grow scattered

Guadalajara

at the rate of 4 to 6 on
an A. over large tracts
of the plains country
along the river.

Salto de Juanacatlan
The road for the falls
leaves the Mexican
Central at El Castillo.

People. — Many faces
both of men and women
in this country seem
to me to closely resemble
those of chinthee.

Carpodacus mex fron.

Ardea herodias.

Cathartes aura.

benzyl larger than
cabanis?

Discalopus macrourus,
in large flocks

Fa Barea.
Carpodacus mex. from.
Ardea herodias.
Cathartes aura.
Ceryle. (a sp. apparently
much larger than *C.*
cabanisi.)

Tringoides macrurus.
Sturnella m. mex.
Pipilo fuscus.
Falco sparverius.
Empidonax.
Melanerpes (a cactus sp.)
Stelodictes.
Agelaius.
Harporhynchus curvirostris.
Pyrrocephalus r. mex.
Mimus polyglottos.
Circus hudsonius.
Buteo borealis.
Tantalus loculatus.
Black Ibis.
Afaja afaja.

Fa Barea.

Sturnella m. mex.
Pipilo fuscus.
Falco sparverius.
Baccharis (along streams)
Willows (along river)
Guamuchil.
Guayaba.
Opuntias (sev. sp.)
Eugenia.
Pae Spomea.
Poles and flags along
streams.
Peripodium macronatum
along stream at Fa Capilla.

Nov 18. Fa Barea
Return here today.

Nov. 19.

Spend a large share
of the day trying to
obtain specimens of

La Barca

both sexes of the
redwinged Black birds
but although I found 25
in abundance I failed
to secure a single ♀
and the flocks that
I saw consisted
apparently entirely of
♂. I also saw flocks
of redwings, *Xanthocephalus*,
Scolecophagus and
Molothrus all mixed
together.

Helodytes. Secured
several specimens of
the species found
here among some
cactus patches.

Nov. 20

Succeed at last in

Nov. 21.

Abasco, Wood station,
No buildings except station.
Hills about 5 mi. to N.W.
covered with low growing
timber.

Wheat. Considerable
is being and has been
sown throughout the
fertile section of country
stretching from Tlapuato
to Guadalajara.

La Piedad, Stages run
across to town about a
mi. away.

Penjamo. About a league
away is large town situated
at base of eastern bare hills.
A few mi. away is hill
with low growing timber
on it.

Aguas Calientes.
Fresnillo.

Selling my outfit just
at a very cheap price.

Nov. 21 Aguas Calientes.

Leave La Brea soon
after noon and reach
Tlapuato about 6 P.M. Line
7. Had to change cars and
in a few minutes was
going on northward by
Vehet train for Tampico.
I had to change again at
Aguas and lay over until
the through Northbound
train came along at noon.
next day.

Nov 22. Fresnillo.

Reached Fresnillo about
5:30 P.M.

Dipodomys spectabilis.
I began to see signs of them.

soon after leaving Aguas
calientes and think that
small *gimnopus* also
occur.

Guadalupe, Zacatecas.
This is a large town on
the southern slope of
the hills at Zacatecas and
is a good point from
which to work this
locality. Nearby are
some of the highest hills
of the divide. A short
distance above the town I
saw signs of Thomomys?
on the upper side of
the R.R.

Calera, I think *Thomomys*
occur near here. There are
places at which one could

Hda. de Saucedo.

stop here.

Weather. It is now rather rainy but still warm. This is the first rain that has fallen for a mo. at least.

Nov 23

Arrange today to leave here tomorrow for Valparaiso a small town about 25 leagues west of here.

Nov. 24. Saucedo

Left Presnillo this morning and arrived here about 4 P.M. after travelling about 18 leagues in a S.W. direction. Saucedo is an hacienda situated on a small

stream which I believe finally reaches the Gauthago river. This place is situated near the point where the level-plains of the tableland begin to become broken and the slope toward the west coast begins.

Road. The country was pretty level until we reached a point near the hda. where it becomes more hilly in character. The road from Fresno follows along the nearly level plain with hills ridges of low hills rising to a height of 500 or 1000 ft. on either

Hda. de Saucedá,

Gopher, (at Cabrales)

Hda. de Saucedá,

side of the road all along. The hills are pretty barren but the higher ones are covered thickly with brush and some of them have a few stunted oaks and piñon pine on them. on the plain the veg. is mainly a few scattered yuccas and patches of Opuntias of several spp. now ripening their red fruit, and everywhere there is a fair growth of grass.

Dipodomys spectabilis.
Signs were seen a few miles west of Fresnillo along the road.

Valparaiso.

Spermop. mac.

Geococcyx californianus.

Discalops mac.

Carpodacus mex. fron.

Molothrus.

Pipilo fuscus.

Helodytes.

Scardafella inca.

Carpodacus m. fron.

Chondestes grammacus.

Cathartes aura.

Valparaiso.

Gopher signs. Occur at Corrales or Cabrales the point where we stopped nearly two hrs. to rest. This is about $\frac{1}{2}$ way from Presnells to Saucedo.

Nov 25, Valparaiso.

Leave Saucedo about 8:30 A.M. and arrive here about 12:30. Distance said to be seven leagues. The direction was S.W.

Road leads all the way through a rolling piece of country. Flanked by ~~higher hills on which~~

Veg. Mainly the same as that of yesterday. The country is pretty well covered with grass

Sierra de Valparaiso.

- Peromyscus* (long eared) v (11773)
 ... (som sp) v (11786)
Thomomys fulvior? v (11784)
Reithrodontomys v (11790)
Urocyon v
Canis v
Canis latrans v
Sciurus niger v (11772)
Peromyscus bulleri v (11780)
Thomomys v (11785)
Peromyscus (l. sp.) v (11835)
Conopatus v (11844)
Vesperugo.
Bat. v (11849)
Peromyscus (4 sp.) (11861)
Neotoma v (11864)
~~*Procyon*~~ *Felis concolor* v
Procyon v ~~*Felis*~~ *pus* v
Dicotyles *tajacu* v
Tatusia novemcincta v
~~*Urocyon*~~ - *Canis* *rufus* v

Sierra de Valparaiso.

and there are extensive patches of *Opuntias* and a few small, thorny bushes.

Valparaiso is a small place situated on a small stream - one of the headwaters of a branch of the Santiago river.

Nov 26. Sierra de Valparaiso

Left Valparaiso this morning at 10:30 A.M. and made camp at an altitude of 8500 ft. about 5 P.M.

Road leads up very gradually to the top to the Sierra which is a sort of mesa country.

These mts. are different somewhat in character from the mts. crossed farther

Sierra de Valparaiso.

- ✓ *Cathartes aura*.
- ✓ *Corvus sinuatus*
- ✓ *Euphilotis*
- ✓ *Catherpes mex.*
- ✓ *Melanerpes form* (4948)
- ✓ *Apelocoma* (4945)
- ✓ *Otilogomys* (4946)
- ✓ *Columba fasciata*
- ✓ *Merula nig.*
- ✓ *Sitta mexicana* (4943)
- ✓ *Parus meridionalis*
- ✓ *Meleagris*
- ✓ *Sialia*
- ✓ *Pipilo maculatus*
- ✓ *Falco sparverius*.
- ✓ *Psittacus melanotis*.
- ✓ *Campophilus imperialis*.
- ✓ *Junco cinereus*.
- ✓ *Centurus mexicana*.
- ✓ *Colaptes cafer*

to the west. The formation here seems to be granite or some kind of rock that in weathering leaves columns ~~on~~ and what appears at a little distance to be masses of them whenever rock is exposed as for instance the top or brow of a hill.

Pinoñes and a kind of cedar commence at 7000 ft altitude.

Oaks. First ones commence at 7100 ft.

Pines begin at 7400 ft.

Pine (long-leaved) begins at 8000 ft.

Tamias - First specimens were seen at 8200 ft.

Nov 27

Sierra de Valparaiso.

- Amphispiza superciliosa* (4953)
Proglodytes
Phryothorus b. *gairdii*? (4959)
Pipilo fuscus.
Ceryle
Dryobates (unsp.) (4944)
Vireo (4946)
Cyanocitta (4947)
Dryobates (white-bellied) (4949)
Dendroica auduboni.
Dendroica (4952)
Contopus (4956)
Sialia (4957)
Ceryle.

We move camp this morning to a place near the highest ridge of this part of the Sierra where I settle down for regular work.

Peromyscus - Traps set along a little stream last night yielded specimens of the common long eared species.

~~Ag. Pines are not so very conspicuous on the~~

Ag. Pines and oaks are about equally divided in numbers on these mts. but most of the trees are rather small although it must be remembered that a great deal of timber has been cut off and carried away even as

Valparaiso.

- *Spermophilus macrourus*,
- *Reithrodontomys* (11885)
- *Peromyscus* (com. sp.) (11892)
- " (sm. brown) (11888)
- *Neotoma* (11886)
- *Heteromys*. (11890)
- *Sigmodon*. (11935)
- *Perognathus*, (spiny) (11927)
- *Onychomys*.
- *Cariacus latrans*.
- *Peromyscus* (wh. ft.) (11912)
- *Lepus*. (11958)
- " (jack) (11978)
- *Perognathus* (l. sp.) (11926)
- *Perognathus* (sm. sp.) (11959)
- *Procyon*.
- *Lynx*.
- *Mephitis*. (11993)
- *Didelphys*
- *Dipodomys* (11936)

Valparaiso

far as Zacatecas.

Dec. 8. Valparaiso.

Return here today.

Find a grand fiesta in progress and the town full of people. The usual merry-go-round and gambling games and an occasional bullfight. I went to one of the latter this afternoon. It was a rather tame affair - the bulls not being very vicious. Here they usually let in a bull after the regular fight is over for the common people to play with. This afternoon they were given a rather vicious fellow with

Valparaiso.
Pipilo fuscus.
Melodytes, 4962
Salpinctes obsoletus
Harporhynchus curv.
Carpodacus m. front.
Scardafella inca.
Dinicabes macrourus.
Chondestes grammacus.
Gonius l. lyncus.
Tayouis saya.
Zenaidura macroura.
Hummer (broad-billed)
Quail.
Pyrocephalus r. mex.
Molothrus.
Agelaius.
Prochilus rufus
Melospiza lincolni.
Cathartes aura.
Corvus sinuatus.
Geococcyx californianus.
Falco sparverius.

Tipi?

his horns sawed off and
he caught and tossed
two or three boys but did
not appear to hurt them
much. They finally succeeded
by sheer force of numbers
in getting hold of him
by tail, horns and every
other point of vantage
and one or two tried
riding him. The merry-
go-round is kept going
until a very late hour
at night and the music
that goes along with it
mingled with the
shouting and whistling
of the natives makes a
fearful din.

Dec. 9.

Valparaiso.

Bacterpes mex.
Tyrannus vociferans
Mimus polyglottos.
Colaptes cafer.
Dryobates scalaris.
Aegialitis vocifera.
Circus hudsonius.
Ardea herodias.
Marsh Wren, (4966)

The fiesta still continues
and will last until
Sunday.

I spent the afternoon
setting traps up above
Altoniles setting traps.

Dec. 10.

Made a fair catch last
night. *Peromyscus* from rocks
and cliffs at 7000 ft.

Neotoma - caught two
specimens in mouse traps.
They live along the cliffs
or about rocks or along banks
where they build piles of
sticks in front of their
burrows and make well
worn runways which
lead off for considerable
distances in all

Dec. 12.

Secured two species
of land shells and
a frog today to from
the stream which flows
from the hot springs
at Atotonilco.

directions.

Dec. 11.

Still trapping up near
Atotonilco. A. is an Lda.

A large hot spring here
furnishes baths for the
people of this vicinity.

Dec. Yucca, Agave (2 sp.)
one of which I have collected.
Guisacche, Mezquite;
Opuntias, several species.
Schinus molle.

Dec. 12.

Peromyscus. (white-footed)
Apparently same as species
from the top of the mts.
near here. Two specimens
taken last night were
caught at an alt. of
about 6800 ft.

Dec. 13

Lepus - One cottontail was brought in today. They do not appear to be very common here. They occur sparingly among the cañon and brush along the river and the arroyos.

Weather continues clear.

Dec. 14

Perognathus - A large species presumably belonging to this genus. It has so much superficial resemblance to Heteromys that it was only after I got my specimens all and was looking them over that

I noticed that it was different. It has short ears, soft fur, grooved upper incisors and a very broad and conspicuous lateral buffy stripe separating the dark fur of upper surface from white of lower parts.

Signodon. One specimen was caught in a No. 10. trap. It evidently belongs to a different species ^{to} from the one found in the nets. It is not so buffy in color and the short hairs of inner surface of ears lack the grayish color which is so conspicuous in Signodon fulviventris.

The *Sigmodon* here do not enter traps so readily as *S. fulviventer*. They make broad roads through the thick grass and weeds along banks and among cacti and other brush.

Perognathus (l. tailed)
One specimen of this species caught along a stone wall at an alt. of about 6500 ft

Dec. 15.

Perognathus. A fine large species from the loose sandy spots along the river usually grown up with weeds. This is the largest species of *Perognathus* that I have ever seen.

Dec 16.

Pecognathus (l. sp.) Four fine specimens of the large P. were taken last night.

Pecognathus (sm. sp.) One specimen of the small species was taken last night in same place as the large one. This specimen is very gray in color and lacks almost entirely the buffy line which separates feet of upper from that of lower part.

Dec 18.

Yesterday and today I have been trapping mainly for the large species of

Fresnillo.

Fresnillo.

Perognathus and have been also getting a few specimens of other species.

Dec 19.

Pack in my last traps and prepare to leave tomorrow morning by stage.

Perognathus (l.s.p.) Got one more specimen last night so that altogether I have seven or eight of them.

Dec 20.

Took the stage at 3:45 A.M. for Fresnillo where I arrive about 5 P.M.

Cups, Cucur - small ones along the road near the Hda of Tancunda.

Dec 21.

Ship specimens and

San Luis Potosí.

Take train in afternoon for
San Luis Potosí.

Dec 22.

Arrive at 6 AM in
San Luis Potosí. See U.S.
Consul and interview the
Gov. of the state Sr. Carlos
Gutierrez in afternoon and
secure letters to Jefe
Político.

Dec 23.

Am waiting for instructions
for further work and
meanwhile getting ready to
work down in the eastern
part of the state.

Dec 29.

Until today have been
attending to various things
preparatory to leaving on

Pula.

Lepus (ack)

Carpodacus mex. zon.

Spinus p. mex.

Chondestes grammacus.

Pyrrocephalus a. mex.

Salpinctes obsoletus.

Pipilo fuscus.

Pula.

Pachuca.

trip to Gulf coast. At
7:00 7 AM. I leave for
Pula Hidalgo and travel
the entire day.

Dec. 28. Pula, Hidalgo

Arrived here at 4 AM.
Weather is clear and
frothy. Spend some time
today along the river
bank and about the cliffs
near the town collecting
land and freshwater
shells. Of the former
I found three species
and of the latter two —
one of which is a small
bivalve.

Dec, 31st Pachuca, Hidalgo.
Climbed a hill near Pula
this morning in company

Pulancingo.

Lepus (cot)

Dendroica auduboni.
Carpodacus mex. form.
Salpinctes obsoletus.
Chondestes grammacus.
Zenaidura macroura.
Otocoris
Circus hudsonius.
Guiraca caerulea.
Corvus sinuatus.
Marsh Wren.
Song Sparrow.
Vireo.
Spinus p. mex.
Falco sparverius
Thryothorus b. bairdii
Sayornis saya.

Pulancingo.

with the night telegraph operator. We got a fine view of the snow-covered tops of Iztaccihuatl and Popocatepetl to the left of it. The volcanoes looked up over the tops of some hills a few miles from Pula.

I took the train for Pachuca about 10 A.M. and arrived about noon. Weather today has been very windy and cold.

Pulancingo, Hidalgo
Jan 1st 1898.

Took train on Hidalgo R.R. at Pachuca this morning at 8 A.M. and arrived here about noon.

Pulancuzo.
Cathartes mex.

Road runs along
among over a rolling
plain planted largely to
pulque plants. ~~Occasional~~
Hills rising from 500
to 1,000 ft. above the plain
are common. The road
seems to ascend gradually
until it crosses a
ridge at Las Tajas and
then descends rapidly
to the fine valley in
which Pulancuzo is
situated. The altitude
here is about 6800 ft.
Snow fell here early
this morning and for
several hours the hills
were white. The weather
is rather cool this

Huachuango.

/ Lepus (cot)	
/ Sciurus leppai.	12031
Sciurus	
/ Myctinomys.	12017
/ Microtus	12001
/ Blarina (l. sp.)	12008
/ Blarina (sm. sp.)	12013
/ Sorex	12015
/ Onychomys, l. sp.	12000
/ " (sm. sp.)	12040
/ Didelphys (Gray sp.)	12038
/ Canis	
/ Canis	
/ Lepus.	
/ Peromyscus melanophrys?	12054
/ Geomys	12037
/ Reithrodontomys	12023
/ Peromyscus (sm. sp.)	12066
/ Onychomys.	
/ Procyon.	

Huachuango

evening. Hills The hill just at the edge of the town is volcanic in character. On and around it this afternoon I found pieces of ollas and what seemed to be of ancient manufacture and rather large chunks of obsidian scattered about in same place.

Mts. High groups seen a few miles away S. and West of Pulancingo and also N.W. by N.

Jan 3^d Huachuango.

Puebla

Left Pulancingo at 6. A.M. and came on here

Huachinango.

Myadestes
Sporophila ~~sp. nov.~~
Falco spar.
Junco cinereus.
Catherpes aura.
Carpodacus mex. form.
Mimus polyglottos.
Atlapetes? 4967
Contopus? 4968
Empidonax 4969
Helminthophila rufigr. 4970
Proglodytes? 4971
Melospiza lincolni.
Guiraca caerulea.
Melanerpes form.
Pipilo fuscus.
Sporophila. 4974
Melanotis caerulescens
Ceryle cabanisi.
Ptilinopus cin.

by stage arriving about
3 P.M. The road ascends
slowly through ^{rolling} country
with pine timber on the
higher hills. This goes
on until finally we
reach the top of a divide
at Aguasotepic a small
town at an altitude of
7300 ft. according to my
aneroid. From this point
the road descends
rapidly to Huachinango
situated in a fine valley
at 4900 ft. altitude. From
Aguasotepic down to the
Huachinango the climate
is evidently much more
damp than back towards
Tulancingo. The vegetation

Huachuapango.

<i>Sylvania pusilla.</i>	
<i>Piaya</i>	4993
<i>Sphyrapicus varius.</i>	
<i>Geothlypis</i>	
<i>Dendrocygna</i>	
<i>Myiozetetes similis.</i>	
<i>Thryothorus ludovicianus.</i>	
<i>Catherpes mexicanus.</i>	
<i>Catherpes atrata.</i>	
<i>Hummer</i>	4973
<i>Vireo</i>	4976
<i>Hemiprocne</i>	4977
<i>Basileuterus</i>	4978
<i>Large Sparrow</i>	4981
<i>Grooveback (l. sp.)</i>	4984
<i>Protonotaria</i>	4987
<i>Amphispiza bilineata</i>	4988.
<i>Mniotilta stricklandi?</i>	4989
<i>Piranga</i>	4995
<i>Spinus</i>	4997

here shows that the rainfall must be very heavy.

Jan 4th

Have been setting traps all day. Found signs of lodge gophers and of Microtus.

Veg. Liquidambar?

Melastoma.

Pine (3 sp.)

Alder.

Elder.

Large Junco.

Guayaba.

Solanum.

Gopher. — Saw signs up on the top or near the top that were probably made by the

Huachuapango

Spanow	4998
Spizella soc.	5000
Salicaria	5003
Sceloporus	5004
Woodpecker (small)	5006
Comptosia	5008
Mammipia	5009

same species found
here.

Jan. 5th

Blarina — A large ^{runways} species from Microtus ^{along} ^{damp} banks overgrown with grass and weeds. This species also appears to make runways of its own along the bases of little banks and along shelter of at any kind.

Microtus — Several specimens from runways mainly along a small the banks of a small stream. These situations are always grown up with grass and weeds.

Cuyzomys, caught in a tortilla baited trap

set in a worn place
near a small stream.

Jan. 8.

Sciurus leppii. Several
were brought in by a native
hunter.

Reithrodontomys. A large
rather chestnut colored sp.
from grass along creek.

Didelphis. Gray furred
sp.

Geomys. Very large in
size belongs to *unisulcati*
series. The grooves in upper
incisors are very close to
inner margins of teeth. Hair
long and coarse of a slightly
rusty color and with a
few gray - hairs intermixed
with the other fur in

specimen taken today. They
do not enter traps
readily.

Scimus deppei. Type
locality Papantla, V.C.

Phanes espin; local
name for *D. leotylos*.

Tusa real = *paca*?

Jan. 11.

Myzomys. Small dark
species from darker parts
of arroyos in the woods.
This is similar to dark
species of *Myzomys* collected
elsewhere.

(4984) Grosbeak. Goes in flocks
of from 4 or 5 to 10 or 12
individuals. Appears to be
not uncommon.

Peromyscus melanophrys?

I got a pair of other fine species on an oak tree in an arroyo above the town.

Piaya. A specimen skinned today was very fat.

(4994) A large species same as 4973.

4996. Greenish species with white streak over eye.

4997. *Spinus notatus*? Has black head and throat and black wings crossed by broad yellow band.

Jan. 13.

Peromyscus. A medium sized species from among the oaks usually here mingled with the pines

or grow along the lower border of the pines.

Reithrodontomys. The species found here probably nests in bushes and small trees and is at least partly arboreal in habits for I caught one last night in the hollow of an old oak at a point at least 4 ft. from the ground.

Climate. Here it is very damp and the country very similar in character to that a little above Jalapa V.C. but I think the rainfall is less here.

Jan. 14.

Mammals. Skipped well up

San Pedro

in the tops of trees. It has a rather lively song which it sings continuously while searching about among the branches for food.

Melanotis caerulescens.

Not very common apparently. Two I found resting about among the leaves on the ground in the midst of dense bush.

Jan. 16. San Pedro.

Leave Huanchinango and reach the town at 1500 ft. altitude according to my aneroid. The dist. was about 27 mi.

Road. Rains occur occasionally on this slope whenever a northwesterly

flowing along the coast even at this season. This road was rather muddy in a few places but is generally very good. The slope is gradual from Huanchimango down to here.

Veg. Grows gradually more abundant and ~~just~~ and more tropical in character. Just below Jico a heavy forest of oaks occurs. These oaks are confined mainly to patches and a little lower down and the climate appears to become slightly drier in character. ~~In~~ This oak forest has a very heavy rainfall.

Near Metallogne.

Geomys	12077
Lepus (wood sp)	12172
Peromyscus. sm sp	12076
Reassus	
Sciurus leppii	12143
Sciurus (chilensis - bellii)	12083
Dicotyles	12126
Heteromys	12081
Canis	12150
Nasua narica	
Procyon	
Palustris novemcincta	
Parmandua tetradactyla?	
Ateles	
Galictis	
Leucoblephus caudivolutus	
Lepus (est.)	
Didelphys (comadreja)	12110
" (gray sp.)	12124
Caillogomys pala.	
Canis latrans	
Felis onca	

Near Metallogne

Jan. 17. Rancho Nuevo.

Reached this place with Mr. Geo. Carlisle who is in charge of the hda of Aitan.

My packer fails to materialize and this is going to delay me somewhat.

Jan. 18. Near Metallogne

Packer got lost in the trails this side of Mecapalapa this morning but finally showed up at 10 P.M. and I started at once for Mr. J.B. McGills place about 6 miles away. I went first to Hodgson's and from there took a trail to Mr. McGills place where I arrived about 4 A.M.

Near Mettalloyuca.

<i>Felis (tigullos)</i>	
<i>Onychomys</i>	12082.
<i>Sigmodon</i>	12087
<i>Sorex</i>	12113
<i>Peromyscus (cot)</i>	12139
<i>Peromyscus (l. sp.)</i>	12152.
<i>Perithodonomys</i>	12153
<i>Geomys</i>	12170
<i>Desmodus</i>	12180

Jan. 19.

Spent collecting birds.

Jan. 20.

Go to Mettalloyuca about 10 miles away for mail.

Jan. 21.

(5028.) *Harporhynchus longirostris*? Has black shaft streaks below mainly on chest and back along sides and over flanks. belly white.

5029. *Melanerpes*. Not country species.

5031. *Hummer*. (broad-billed) Has tail only of a rufous color.

5033 Small flycatcher. sides of chest and broad band across under tail feathers dull yel.

Long bristles about base of bill.

5036 *Paroquet*? .5. Head and

Near Metalloynca.

- / *Mercula grayi*.
- / What chick.
- / *Tanyma lunosa*.
- / *Helodytes*
- / *Hemiprocne*
- / *Psilodinus morio*
- / *Amazona*.
- / *Pyramus*..
- / *Sylvania pusilla*
- / *Polioptila*
- / *Mimus polyglottos*.
- / *Erethia olivacea*
- / *Cathartes aura*
- / *Catharista atrata*
- / *Proglodytes* 5016
- / ~~*Passerina*~~
- / *Crotophaga sulcirostris*
- / *Colaptes*
- / *Humula m. m.*
- / *Helminthophila ruficap.*

throat black, also back wings and tail. Lower parts with lower part of breast and broad collar extending behind up on to occiput, dull red. This is the ♂ of the sp. of which No. 5021 is the ♀.

5039. Vireo? Crested, black and white-banded bird.

5040. Black bird with light greenish bill.

5043. Hummer. Size very large. Lower surface dull whitish, upper surface green. crown-patch metallic blue. bill long and wide at base. nostril very wide and opening out on side of bill.

5045. *Dendroica*. Sides

Near Metallogyrea.

- / Scardafella inca
- / Euryptila
- / Colaptes flav.
- / Campophiles guatemalensis.
- / Nothocercus.
- / Glaucidium.
- / Dendrocygna.
- / Crax globicera.
- / Progon.
- / Penelope.
- / Merula grayi.
- / Aegialitis vocifera.
- / Clondestes grammacus.
- / Melospiza lincolni.
- / Saltator (l. sp.)
- / Saltator atreps.
- / Poucan (l. sp.)
- Vireo (5557)
- ~~Poucan (l. sp.)~~
- Myctidornis albicollis

of head yellow. Throat black
and streaks of same color
extend back along sides

Jan. 22

Spent mainly in
skinning birds shot yesterday
Geomys. Two specimens
from the heavy forest
near here. They are very
large and seem to be
similar to the specimens
from Huanchinango but are
I think not so well
furred. They belong to the
unimaculate series and
have the grooves in
upper incisors close to
their inner margins.

Jan. 23. Go to the
town and in the afternoon

Near Mutatogue

<i>Sylvania pusilla</i> .	
<i>Phaya</i> .	
<i>Mniobilta varia?</i>	
<i>Asteria placida</i> .	
<i>Sphyrapicus varius</i> .	
<i>Gallina de Guinea</i> = <i>G. de</i>	
<i>Mocizuma</i> .	
<i>Pachyrhynchus?</i>	
<i>Truscalus macronus</i> .	
<i>Palangus dub.</i>	
<i>Pityta personata</i> .	
<i>Centurus olivaceus</i> .	
<i>Aegialitis vocifera</i> .	
<i>Ardea herodias</i> .	5034
Woodpecker 5015	5015
<i>Dendrocolaptes</i>	5017
<i>Tanager</i> (l. sp.)	5021
<i>Embernagra</i>	5022
<i>Geothlypis</i> .	5023
<i>Xanthoma lutea</i>	5024

go home with Mr. Leslie Moffett and spend the night. Mr. Moffett's place is on the slope about a half hour's ride from town and overlooking the river. Like most of the other planters here Mr. M. is planting coffee.

Jan. 24.

Went out hunting in the morning but did not get anything. Found a waterhole that peccaries sometimes come to wallow in but they had not been there for several days.

Leimus. (chickadee-like).

Near Mitatloynea

/ Passerina (Blue headed)	5025
/ Harpor longirostris	5027
* Melampus (coast. sp.)	5029
/ Pyramus	5030
/ Hummer (broad-billed)	5031
/ Empidonax	5032
/ Small orange flycatcher	5033
/ Vireo (barn)	5039
/ Tropicial (whit-bill)	5040
/ Engisptila	5041
/ White cheer	5042
/ Hummer	5043
/ Proglodytes	5044
Dendroica	5045
/ Cardinalis	5046
/ Big parake	5047
/ Ceryle cabanisi	5048
/ Piranga	5049
/ Vireo (chestnut over eye)	5051
/ Saltator atriceps	5052

I caught this afternoon
two specimens of a large
species with deep chestnut
belly and very whitest
gray back.

Scimus deppii seen.

Jan. 26.

Sigmodon. Several
specimens from the
partly open ground in
an old clearing and
on a patch of low with
grass.

Big Parake. Last
yesterday evening just at
dark I shot a very large
Parake from the topmost
branch of an old tree.
It would leave the branch
and take short turns

near Metatlayuca

/ Saltator (l. sp.)	5053
/ Toucan. (l. sp.)	5054
/ Chat	5055
/ Turdus	5056
/ Icterus (flk. headed)	5058
/ Hemicorhina (am. br.)	5059
/ Basileuterus	5061
Xanthoeca	4
/ Glaucidium fenn.	5072
/ Dendrocolaptes (am. sp.)	5073
/ Grosbeak (am. sp.)	5165 5074
/ Steliodytes	5075
/ Tanager (am. red)	5077
/ Myiarchus	5078
/ Phoenicotheraps	5082
/ Progon (red)	5084
/ Amazona	5089
/ Dove (red-tailed)	5090
/ Dendrocygna	5091
/ Vireo (yellow over eye)	5093

about in in pursuit of insects and in a minute or two always return to the same place.

Weather. Is alternately clear and cloudy. North seems to be flowing most of the time.

Jan. 27.

(5051) Vireo with yellow lower surface and chestnut stripe over eye.

Didelphys medium sized sp. caught in trap set near a water hole. This individual did not "possess" but on the contrary was quite savage and would bite at everything within reach.

near Mutaltoginea.

Vireo (wh. over eye)	5094
Manirotella	5096
Dendroica (yellow. rump etc)	5097
Big Flycatcher	5103
Dendroica	5105
Polioptila	5110
Scelus (blk - throated)	5112
Woodpecker (gr)	5113
Flycatcher (orange)	5114
Scelus	5115
Thryothorus mac.	5117.
Nyctidromus albicollis	5118
Flumella	5119
Thrush (Chestnut ^{under} tail cov.)	5123
Dendroica (yellow head)	5127
Hemicorhina (l. dark)	5128
Vireo wh. over eye.	5094

Jan. 28.

Didelphys (medium sized)
when caught in trap this
makes a hissing noise
somewhat like a cat.

Jan. 29.

Only tropicalis. One
specimen badly mutilated
by ants. Caught among
the second growth timber
under an old log in
an old clearing.

Jan. 30.

Go to town of Mutaltog
inea.

Lepus. Shoot a wood
rabbit of very dark color.
The upper parts are largely
of a chestnut color.

Feb. 1.

Dicotyles tapan Two
specimens killed out of
a herd of 12 or 15 during
the rain.

Feb. 2.

5058 *Icterus*. a black.
headed species. Wings and
tail also black. Inner tail
feathers greenish. Lower
surface yellow, dorsal
surface olive green and
this color extends up
on nape of neck to head.

5059. *Henicorhina*. Small
brown species from heavy
forest. They generally stay
in the thick bush but
I found them out along
a trail during a light
rain this morning.

5061. *Basileuterus*. From heavy forest. Generally stays in the thick underbrush but this morning I found them along the trail during a light shower of rain.

Feb. 4.

Tanager. The large sp. in which the ♂ and ♀ are so different has a sharp whistle which is uttered every few seconds at times by both sexes.

Cassinius. Has a rolling note and loud enough to be heard at a distance of 100 yds. or more.

Feb. 6.

Go to Metalloquén
for mail etc.

Sciurus deserti. Three
specimens from the
heavy forest near here.

Sciurus. A black
squirrel probably belonging
to same species as
the large chestnut
believed sp.

Lepus. Three species.
Of cottontail from a
potrero near Metalloquén.

Feb. 8.

Go over to Dr. Grant's.
a ranch about 3 mi. from
here and climb a hill
near the ranch called
the "Cerro del Palmar"

This hill is probably a thousand feet higher than the surrounding country. It is covered like most of this section of country - with heavy forest. Over large areas of the slopes the forest is so heavy that it checks the growth of the underbrush and one can wander about at will without using a machete.

Veg. The heavy forests on the slopes of the Cerro del Palmar are made up largely of chico zapote which shades the ground

sufficiently to kill
most of the underbrush.
The large stony ~~tambos~~
called here "taro"
is common about
the marshy spots which
abound on the slopes.
Cedar (Spanish cedar)
trees of very large size
are rather abundant
for cedar. They are
being cut and the
bunks made into
canoes or squared
for getting out and
floating down the
river to Puyuan.

Ficus. A few large
wild fig trees occur
in this section but

they do not appear
to be abundant and
are generally of small
size and of kinds
which divide like
banyan trees instead
of having one large
trunk supported by
butresses.

Cecibanga fine
examples of this
tree occur in small
numbers. Dialot occurs
Mala muer. Oaks on
mesa de coronales.

Glaucoedon ferrugineus
Possibly common here.
May be heard calling
in considerable numbers
at times during the

early morning hours.

5073. A small species somewhat like *Dendrocolaptes*. It has the tail wings and back of a rusty color like *Dendrocolaptes*. The head, neck and lower surface are of a brownish color and the bill instead of being decidedly curved as in *Dendrocolaptes* is nearly straight. In size it is much smaller than any *Dendrocolaptes* that I have ever seen.

5074. A ♀ of a small species of grosbeak. Shot in the heavy forest.

5077. Parakeet. Rather

small in size tho
and of a deep red
color with white bars
across wings.

5078. *Mniarchus*. A
rather small species.

Feb. 18.

Lanius. One specimen
of the common one
found here.

Feb. 13

Go to Metaltayua.

Ana Dendrocygna. A native
hunter sold me a
specimen rather small
in size with dark colored
bill and feet.

Pitheodolomys. One
specimen was taken
yesterday in a trap

set on a bunch of sweet
bananas.

Dendrocolaptes. The
large species here has
a song but appears to be
generally silent when
at work.

Harporhynchus long.
This bird has a very
fine song. It usually or
frequently chooses a
dead branch or other
point of vantage above
the lowgrowing vegetation
and sings pretty steadily
sometimes for half of
an hour.

Feb. 14.

(5093) Vireo. Smaller than
5094. Yellow streak from eye

to bill.

5094. Vireo. Larger than preceding with white about eye and streak of same color extending from eye to bill.

5097. Dendroica. Yellow rump; streaked with black on sides.

5091. Dendroica? Has black bill and ft. dark but not black.

5088. Trogon. Small yellow bellied.

5100. Warbler with brightly colored head.

5105. Grosbeak. Blue, ♂ of small species of which some time ago I collected the ♀.

5107. Black-throated species.

Feb. 18

5112. *Icterus*. Black-throated species. This bird has top of head yellow.

5113. Large wood pecker in which ♂ has top of head of a dark color. Back, yellowish green. Lower surface band, green and dull whitish.

Feb. 19

5114. Strange *Ptycaten* with yellow rump, and strong bill somewhat like that of a vireo.

5122. *Parus* with black head and dark red collar, already collected here.

5123. *Sp.* with black cap on head and

Peperala.

chestnut under tail
coverts.

Feb. 22.

5125. Sp. with white
stripe running from eye
to bill. Already collected.

5126. Sp. with black
throat and black streaks
on sides. Already collected
here.

5127. Sp. with yellow
head.

5128. Sp. large and
dark colored.

Feb. 27. Peperala.

Leave Mr. McNeil's
place and make about
10 leagues to the tobacco
ranch of Peperala situated
in a southeasterly

direction from Metlattozuc.

Purich. Whistles occasionally during all hours of the day but mainly during the early morning and late evening hours.

Myadestes. The sp. found here has a very fine song. A couple were heard in the woods near Mecapalapa.

Mecapalapa seems to be nearly S. of Metlattozuc. The inhabitants are mostly full blooded Indians, said to be Potonakos.

Women wear a very peculiar upper garment that is quite very

elaborately embossed,

Left Meapalapa about
2 P.M. and climbed up a
steep hillside and finally
came out on what is
called the mesa of
Zanahue. This mesa is
somewhat similar to that
of Coronado on which
Metlatonque is situated.
There are several of
these mesas in this
vicinity and all ~~are~~ ^{have}
gentle rolling or gentle
level tops and are
timbered mainly by
live oaks & the ~~only~~
oaks in this
immediate neighborhood.
The oaks are interrupted

Coazimeta.

here and there by open grassy llanos of considerable extent.

Feb. 28. Day Coazimeta
Vera Cruz.

Left Tepusala about 9 A.M. but made about 11 leagues in a S.E. direction to this place - a town made like most towns in this region, of Indians. A dance was improvised during the evening. It seemed that the 28, was the "dia del santo de cierto joven" in the town and his friends were helping him celebrate it. The usual quantity of legumes

Papanuta.

- ✓ *Hebromys* (12188)
- ✓ *Hebromys* (12187)
- ✓ *Didelphys* (medium)
- ~~*Didelphys* (l. gray) (12189)~~
- ✓ *Sciurus deserti* (12186)
- ✓ *Sciurus*
- ✓ *Hebromys* (12193)
- ✓ *Didelphys* (l. gray) (12197)
- ✓ " (medium) (12189)
- ✓ *Peromyscus melanotis*. 12195
- ✓ *Sciurus* (l. sp.) 12200

Papanuta

were consumed and the people dedicated themselves to the dance with joyous abandon. waltzes, polkas, and schottisches were played but the fandango as usual was the favorite with the indian population.

Mar. 1. Papanuta

V.C. come on here today a distance of 5 leagues in a S.E. direction. The town is situated on a piece of rolling ground and has higher hills all about it. None however are more than two or three hundred

ft. higher than the town.

Mar. 4.

5142. Ichneumon with black throat, back, wings and tail.

5144 Vinciguerra
sp. with rusty stripes over eyes.

Mar. 5

Guasima is the
called Guahlo- Jachin
sant.

Chaca the with
reddish bark scaling
off also called palo
moreno.

Indians. Here they
belong to a tribe called
the Polonacos. Many
of them do not speak

Papamita.

<i>Aegialitis vocifera</i>	v
<i>Pilangus dub.</i>	v
<i>Pelyra personata</i>	5153
<i>Erethia olivacea.</i>	v
<i>Melanotis caeruleus.</i>	v
<i>Phalacrocorax.</i>	v
<i>Sporophila mor.</i>	v
<i>Columbigallina pas.</i>	v
.. <i>rufis.</i>	v
Chat (yellow breasted)	v
<i>Crotophaga sulci.</i>	v
<i>Pilangus dubianus</i>	v
<i>Megascops tex.</i>	v
<i>Erethia olivacea.</i>	v
What Chur.	v
<i>Thryothorus</i>	v
<i>Psittacus morio.</i>	v
<i>Tattalo (l. sp.)</i>	v
<i>Zelus tex. texabil</i>	5142v
<i>Zelus</i>	v

the Spanish language at all.

Didelphys. A large ♀ of the gray sp. taken today had nine young ones in her pouch and did not 'possum' at all but appeared to be quite savage.

Mar. 6.

5151 Sp. with chestnut under tail coverts.

5152. Sp. with yellow stripe over eye.

Groups. Apparently same species collected at Metlatzuc. Found in low growing woods here and also in open grassy fields.

Papaueta.

<i>Cerap globicera?</i>	v
<i>Penelope?</i>	v
<i>Merula grayi</i> (5140)	v
Big <i>Phycatetus</i> .	(5150) v
<i>Micriarchus</i> (5141)	v
<i>Melanerpes</i> (5143)	v
<i>Vireolarurus</i> (5144)	v
<i>Platypsaris</i> (5145)	v
<i>Geothlypis</i>	5146 v
<i>Tanager</i> (l. sp.)	5147 v
<i>Empidonax</i> (com. sp.)	5148 v
<i>Hirundo</i> (fork-tailed)	5149 v
Thrush (chestnut under tail coo)	5151 v
Vireo (yellow stripe over eye)	5152 v
<i>Mimus</i>	5154 v
<i>Phainopepla</i>	5155 v
..	5156 v
<i>Geothlypis</i>	5157 v
<i>Erethia olivacea</i>	5159 v
<i>Scardafella inca</i> .	v

Decomys melanotos.

Two specimens from a bush covered, rocky hill near the town.

Mar. 9.

Go today to the Hda. del Carmen a large place about three leagues from here. Find the forest much better out that way.

Mar. 10.

Sciurus. 4 specimens of the large squirrel were sent me from the Hda. del Carmen. Two of them are black.

Sciurus desmopii. Does not appear to be very abundant here. They say that it is found

Papamita.

<i>Zenaidura macroura</i>	v
What cheer bird.	v
<i>Columus agilis</i> .	v
<i>Cathartes aura</i>	v
<i>Scolecophagus</i>	v
(l sp)	v
<i>Falco</i> sp.	v
<i>Passerina</i> (blue headed)	v
<i>Trochiloides</i> (white bell)	v
<i>Poliophtila</i> .	v

mainly in the forests
on the hills and does
not favor the low ground.

Tanager (l sp.) with
black head and breast.

~~Doth & and I have~~ The
♂ has a rather pleasant
song and both sexes
frequently utter a sharp
call note.

Mar. 12.

Go out to Hda. del Carmen
again to try once more
for specimens of *Scimus*
leppii.

Mar. 13.

Scimus leppii. By
offering a dollar apiece
I managed to secure
two specimens of

Sciurus deppii.

Return to town in
the afternoon.

Vainilla. Said to be
worth 18-20 dollars per
lb. It takes on an average
100 pods to make a lb. The
plant begins to produce
when three years old.
It is said to be best to
plant in in an alcaqual
or cut down the woods
and raise one crop of
corn and then plant
the vainilla on certain
species of the new
growth that springs
up meanwhile cutting
down everything else.
Among the trees that

same best for this purpose
is the "fayatilla" or cacama-
pashette, Laurel, estibillo
and the higuera rasposa.
It is generally planted
in Feb. or Aug. Plants
on an average do not
bear more than two
pods each. The natives
steal it and plantations
have to be constantly
watched. It is said to
not be best to fertilize
plants artificially as
the vainilla which
results is of very
inferior quality and
this process damages
the plant.

Mar. 14.

Jamora. $\frac{17}{15} \frac{2}{15}$

Prepare to leave
tomorrow for Jamora.
Mar. 15. Jamora.

Jamora.

Prepare to leave
tomorrow for Jamora.
Mar. 15. Jamora.

Left Tepic at 11 A.M.
and arrived here at 6
P.M. Dist. about 9 leagues
in an easterly direction.

Road descended slowly
among low hills. Down
thus far there is no
coast plain or rather
in extensive level plain
such is common along
this coast. A great deal
of land has been cleared
and is now partly
grown up with brush
or planted to grass but
there are patches of
nearly virgin forest

Zamora.

Agelaius

Melodytes

Ardea herodias.

Jacana gymnostoma

Tringoides macrurus.

Tropical (white-bell)

Psilothorus morio,

Stelgidopteryx serripes,

What bird?

Crotopaga sulcirostris,

Geothlypis.

Dendroica auduboni?

here and there among
the hills and of
considerable extent.

Very large hiqueras of
the kind that divide
into many humps, near
base are common.

Vegetation. In general
character similar to
that about Popocatepec and
Mitlatoyuca.

Mar. 17.

Made a trip across the
river to an island.

opposite the town in
search of ♂ and ♀ redwings.

Found a few scattered
individuals among the
willows and killed
five all of which proved

to be males. I cannot understand why all of the redwings I have found during the past few months should be males.

Mar. 18.

Went down the river several miles in a canoe in search of female redwings. I saw very few and all were males.

Mar. 19

Go down river in the evening and during night and reach ~~at~~ Peabuckta early next morning.

Mar. 20

Alta Mira.

Pappogeomys?
~~Felis tigris?~~

v

Cross the bar at
Pecolitta in schooner
and wait until
four P.M. for steamer
and as she had then
not appeared we
returned to Pecolitta.

Mar. 21st

Take steamer at
Pecolitta for Vera
Cruz.

Mar. 22, Vera Cruz.
Arrive here today.

Mar. 23^d, ~~Leave~~

Leave for Coatzacoalcas

Mar 24. Arrive
at Coatzacoalcas.

May. 25-27

Spent at Coatzacoalcas

Mar. 28.

Alta Mira,
(continued back one page.)

Desmodus	✓
Helomys.	✓
Peromyscus (com)	✓
... (com. fr.)	✓
Lepus.	✓
Rhynchodonta	✓
Cynomys.	✓
D. delphus (gray)	✓
Sciurus l. p.	✓
... (l. sp.)	✓
Lepus (col.)	✓
... (jack)	✓
Dicotyles tajacu.	✓
Perognathus.	✓
Neotoma	✓
Canis.	✓
Tatusia novemcincta.	✓
Canis latrans	✓
Felis onca.	✓
Felis. (Spotted ocelot)	✓

Alta Mira,

Leave boat. for
Vera Cruz.

Mar. 29, Vera Cruz.
Arrive here today.

Mar. 30. Spent in
Vera Cruz waiting for
steamer.

Mar. 31st Take
"Ward Line" steamer.
"Seneca" for Tampico.
We leave at 5 P.M.

Apr. 1. Tampico.
Panamint. Arrive here
this afternoon. A north
is on and we were to
be able to get in.

Apr. 2. Alta Mira.
Panamint. Leave
Tampico by Monterey
and Gulf R.R. and

Alta Mira,

<i>Crotophaga sulci.</i>	✓
Fork-tailed Flycatcher	✓
<i>Psilochinus morio.</i>	✓
<i>Jacana gym.</i>	✓
<i>Agelaius</i>	✓
<i>Myiurus voc?</i>	✓
<i>Zenaidura mac.</i>	✓
<i>Columbigallina pas.</i>	✓
<i>Platysparis</i>	✓
<i>Cobitis</i>	✓
<i>Amphispiza macroura</i>	✓
<i>Corvus</i>	✓
<i>Nyctichonx albicollis.</i>	✓
<i>Mimus polyglottos.</i>	✓
<i>Oreolais</i>	✓
<i>Scardafella inca.</i>	✓
<i>Xanthocephalus</i>	✓
<i>Cath. ardea</i>	✓
.. <i>ahata</i>	✓
What there	✓

come up to ranch 6. mi.
from Alta Mira. It is
called the "tomato ranch"
as owner has gone largely
into the business of
growing and shipping
tomatoes.

Apr. 8.

Came from ranch to
the little town on the
4th.

Country is quite different
in character from anything
seen farther south.

Veg. was surprised
to find oaks here down
near sealevel.

Tomato ranch of Mr.
Earle near here is said
by Mr. McDonald to

Alta Mira.

<i>Prospial</i> (white field)	✓
<i>Corvus aztec.</i>	✓
<i>Amazona</i> (yellow headed)	✓
<i>Notocercus</i>	✓
<i>Palangus dubianus</i>	✓
<i>Myadestes townsendi</i>	✓
<i>Melospiza lincoln</i>	✓
<i>Columba flav.</i> ?	✓
<i>Tyrannus</i>	✓
<i>Icterus</i>	✓
<i>Melanerpes</i>	✓
<i>Dryobates scalaris</i>	✓
<i>Geothlypis</i>	✓
<i>Polyborus cheriway</i>	✓
<i>Cardinalis</i>	✓
Fork-tailed Flycatcher	✓
<i>Eugenesia</i>	✓
<i>Falco sparverius</i>	✓
<i>Mamm. kin.</i>	✓
<i>Harporhynchus long.</i>	✓

Partner to have paid
\$20000 this year in
silver of 130 A. crates
of tomatoes pay on an
average \$2 a piece.

Apr. 9.

Veg. Ficus, Guayaba.
Went out this afternoon
about 8 mi. north of
here and found con-
siderable change in the
country. The country
becomes more open and
the low forest or
chaparral that covers
most of the country
near here is replaced
by open plains with
with a few brush
and clumps of small

Alta Mira.

<i>Ammodramus</i> .	✓
<i>Campophilus</i> quet.	✓
<i>Geophila</i> scap.	✓
<i>Glaucidium</i>	✓
<i>Crotophaga sulci</i> .	✓
<i>Tamias</i> <i>luxiosa</i> .	✓
<i>Molothrus</i> .	✓
<i>Polyta</i> <i>personata</i> .	✓
<i>Proton</i> .	✓
<i>Scelus</i> <i>spurius</i> .	✓
<i>Clonesta</i> <i>gram</i> .	✓
<i>Corvus</i> .	✓
<i>Momtus</i>	✓
<i>Scelus</i> (med. sig.) 5240	✓
<i>Circus</i> <i>hudsonius</i> .	✓
Crested Bird, (am.)	✓
<i>Dendrocolaptes</i> .	✓
<i>Chelidon</i> <i>euphrogas</i> .	✓
<i>Phalacrocorax</i> .	✓
<i>Melopelia</i> <i>leucoptera</i> .	✓

Notes.

Lanius. One seen and shot on the open plain north of Alta Mira.

Apr. 10.

Molothrus. Two specimens of sp. that builds large nests situated usually in the midst of very thick patches of the wild mesquite found here.

Perognathus. Small sp. found from the ~~sandy~~ ^{open} plain about 4 mi. north of Alta Mira. It was caught at its hole apparently. The hole was under a few brush in a sandy spot.

Alta Mira

<i>Ceryle torquata?</i>	✓
... (sm. chest. breasted)	✓
<i>cafer</i>	✓
<i>Gaucha</i>	✓
<i>Aythya platytera?</i>	✓
<i>Parula</i>	
<i>Columba flav.</i>	✓
What blue.	✓
<i>Jacana gym.</i>	✓
<i>Geothlypis</i>	✓
<i>Meleagris</i>	✓
<i>Chordeiles tex.</i>	✓
<i>Sturnella</i>	✓

Didelphys. A gray
opossum caught yesterday
day rocked himself
violently back & forth
side to side, and as if
he were like a cat
when I approached. He
made no effort to play
possum. It was an
old male.

Apr. 12.

Brought traps in from
out on plain yesterday
and today set out
some for Pocket Gophers
about 4 mi. from here
in an easterly direction.

Mammals which
do not appear to occur
but do occur a spot.

distance south of the
Pamlico river at points,
near the coast. *Scimus*
deppii, *Cercobites* *caud*,
Callogymys *pala*, *Telis*
eyra.

Veg. *Megsueia*, *Opuntia*,
and kind of wild
pineapple.

Psittorhynchus *mois*.
called here "papañ".

Penelope *pub.* local
name "cojolote".

Meleagris. local name
"guajolote".

Grax globicera. Local
name, "Faisan".

Mammals which occur
here but were probably
not found at Metaltoguen.

Sciurus tephrogaster?
Peromyscus 2 sp.
Perognathus. *Neotoma*.
Apr. 13.

Rained all day, very little accomplished, killed a few birds and one squirrel.

Apr. 14.

Pappogeomys? Small gophers with two grooves in upper incisors one of which is close to inner margin of teeth. They are of a gray color very similar to the sandy ground in which they live. The specimens are all from from

a field in which corn
is grown every year.
No signs of ~~30~~ ³⁵ ~~thick~~
have been found in
the forests but they
must occur in places.

Apr. 15.

Go to Tampico for
mail in the afternoon

Apr. 16.

Return to Alta Mira.

5243. ~~#~~ Dendroica with
black throat, collar and
crown. Cheeks and forehead
yellow.

5244. "Gallineta del
agua"

5251. Small crested
bird.

5252. Small sparrow

Apr. 20.

Agelaius. Local name
"Rubinche".

Veg. Taxodium, willow,
aqueduct and ceiba along
Tamasin river.

from marsh.

5254 Shrike warbler
with black face from
marsh.

Apr. 20

Make a canoe in trip
in canoe out to the
Tamasin river. The route
led for several miles
through a narrow
passage among the trees
and across several small
open ponds until we
finally emerged on the
Tamasin. Followed along
up the river for several
miles more and finally
came to a ranch where
I went ashore and in
an old house found

two kinds of bats - a
Desmodus and a leaf-nosed
species living in the same
rooms

Veg. Along river forest
is tropical in character and
I saw no oaks. Mango, Guava,
figs etc. Bananas are raised
extensively along river banks.

to 1000 ft. level

Top 24.1 m.
Bottom 4 m.

Alum 3 lbs.

Antacid 5 "

Hot water 1/2 lb. + some

from above

No. 1 traps 15

11
10
11 day

